What is claimed is:

1. A heat-dissipating fin of a heat sink, the heat sink comprising:

a heat-dissipating base plate; and

a plurality of heat-dissipating fins;

wherein the heat-dissipating base plate has a first surface contacting a heat source and a second surface on which a plurality of grooves having predetermined widths and predetermined depths are formed for inserting the heat-dissipating fins, and the heat-dissipating fins are featured in that:

the heat-dissipating fin is not uniform in thickness, and the thickness of a bottom surface of the heat-dissipating fin facing the groove is greater than the thickness of each of the other portions of the heat-dissipating fin.

2. The heat-dissipating fin of the heat sink of claim 1, wherein the shape of the heat-dissipating fin is trapezoid.

3. The heat-dissipating fin of the heat sink of claim 1, wherein the thickness of the bottom surface of the heat-dissipating fin is slightly less than the width of the groove.

4. The heat-dissipating fin of the heat sink of claim 1, wherein the heat-dissipating fin is made of the metal material selected from the group consisting of copper, copper alloys, aluminum and aluminum alloys.

5. The heat-dissipating fin of the heat sink of claim 1, wherein both sides of the

heat-dissipating fin facing the groove are linear contacting bevels.

6. The heat-dissipating fin of the heat sink of claim 1, wherein both sides of the heat-dissipating fin facing the groove are arc contacting bevels.

7. A manufacturing method of a heat sink, wherein the heat sink comprises a heat-dissipating base plate, having a first surface contacting a heat source and a second surface on which a plurality of grooves having predetermined widths and predetermined depths are formed, the manufacturing method of the heat sink comprising the steps of:

providing a plurality of heat-dissipating fins which are not uniform in thickness, and the thickness of a bottom surface of the heat-dissipating fin is slightly less than the width of the groove;

inserting the heat-dissipating fins into the grooves; and

exerting pressing force onto the second surface of the heat-dissipating base plate between every two heat-dissipating fins, thereby making both sides of each of the grooves tightly attaching to both sides of each of the heat-dissipating fins.

8. The manufacturing method of the heat sink according to claim 7, wherein the way of exerting the pressing force onto both sides of each of the grooves is punching forming.

9. The manufacturing method of the heat sink according to claim 7, wherein the heat-dissipating fin is made of the metal material selected from the group consisting of copper, copper alloys, aluminum and aluminum alloys.

10. The manufacturing method of the heat sink according to claim 7, wherein the heat-dissipating base plate is made of the metal material selected from the group consisting of copper, and copper alloys.

11. The manufacturing method of the heat sink according to claim 7, wherein both sides of the heat-dissipating fin facing the groove are linear contacting bevels.

12. The manufacturing method of the heat sink according to claim 7, wherein both sides of the heat-dissipating fin facing the groove are arc contacting bevels.